Amendments to the Specification:

Please replace the first paragraph on page 5 with the following amended paragraph:

Accordingly, a need has arisen in the art for ~~an~~ improved circuit models for use with simulation and analysis systems.

Please replace the second paragraph on page 11 with the following amended paragraph:

While the enhanced parametric model of Eq. (8) is substantially continuous, this function is only piecewise continuous when $V_o=0$. Therefore, the derivative of this function will not be continuous at this point (step 525). In this case, the cause is that at $V_o=0$, $\cancel{4\$V_o\$\theta}$ $\underline{4V_0\theta}$ is identically zero. To avoid this situation, a compensation constant, $\cancel{\spadesuit}$ $\underline{\Delta}$, can be applied to the square root term of Eq. (8) in addition to the terms $\cancel{4\$V_o\$\theta}$ $\underline{4V_0\theta}$ and $(V_o-V-\theta)^2$.

Please replace the third paragraph on page 11 with the following amended paragraph:

Applying a mathematical identity,

$$(V_0-\theta)^2+4\theta V_0+2V_0\Delta+\underline{2\theta\Delta+}\Delta^2=(V_0+\theta+\Delta)^2, \tag{10}$$

an enhanced parametric base model can be defined as:

$$V_{eff}=V_0-\frac{1}{2}\left\{(V_0-V-\theta-\Delta)+\sqrt{(V_0-V-\theta)^2+4\theta V_0+2V_0\Delta+2\theta\Delta+\Delta^2}\right\} \tag{11}$$

With $\cancel{\spadesuit}$ $\underline{\Delta}=0.01$, for example, the terms inside the square root other than $(V_o-V-\theta)^2$ will never be zero even though $V_o=0$. Recognizing that the overall value within the square root can be negative when the value of V_o is very small, and that the property dictated by

Eq. (2a) needs to be fulfilled only when V_0 is positive, the parametric equation model of Eq. 1 can be further refined as:

$$V_{eff} = V_0 - \frac{1}{2}\left\{(V_0 - V - \theta - \Delta) + \sqrt{(V_0 - V - \theta)^2 + 4\theta V_0 + 2\sqrt{V_0^2}\,\Delta + 2\sqrt{\theta^2}\,\Delta + \Delta^2}\right\}, \qquad (12)$$

which is the desired ~~enchanced~~ enhanced continuous parametric model.